WHAT IS CLAIMED IS:

1. A drive circuit for driving a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive circuit comprising:

a first signal supplying unit that supplies an image signal to the pixel electrodes;

a first detector that detects, on the basis of the image signal per unit time, a first gray level characterizing the brightness of an image;

a variation-signal setting unit that sets a variation signal on the basis of the first gray level; and

a second signal supplying unit that supplies the variation signal to the opposing electrode, the liquid crystal layer being driven by an effective voltage signal generated by modulating the image signal using the variation signal, and

the variation-signal setting unit setting the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal in accordance with an increase in the first gray level.

2. The drive circuit for driving a display device according to claim 1, further comprising:

a second detector that detects a second gray level,

the variation-signal setting unit computing the difference between the first gray level and the second gray level and setting the variation signal so that, when the first gray level is greater than the second gray level, the gray level of the effective voltage signal becomes greater than the gray level of the image signal, and, when the first gray level is less than the second gray level, the gray level of the effective voltage signal becomes less than the gray level of the image signal.

3. The drive circuit for driving a display device according to claim 2, the opposing electrode including a plurality of block electrodes,

the second detector detecting, as the second gray level, a gray level that is detected on the basis of the image signal per unit time and that characterizes the brightness of the image on the entirety of a display area,

the first detector detecting, on the basis of the image signal supplied to the pixel electrodes in an area opposing each of the block electrodes per unit time, the first gray level in that area,

the variation-signal setting unit setting the variation signal for each of the block electrodes on the basis of the gray level difference between the first gray level and the second gray level, and

the second signal supplying unit supplying the variation signal set for each of the block electrodes to the corresponding block electrode.

4. A drive circuit for driving a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive circuit comprising:

a first signal supplying unit that supplies an image signal to the pixel electrodes;

a first detector that computes, on the basis of the image signal per unit time, a first gray level characterizing the brightness of an image;

a variation-signal setting unit that sets a variation signal on the basis of the first gray level; and

a second signal supplying unit that supplies the variation signal to the hold capacitors, the liquid crystal layer being driven by an effective voltage signal generated by modulating the image signal using the variation signal, and

the variation-signal setting unit setting the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal in accordance with an increase in the first gray level.

5. The drive circuit for driving a display device according to claim 4, further comprising:

a second detector that detects a second gray level,

the variation-signal setting unit computing the difference between the first gray level and the second gray level and setting the variation signal so that, when the first gray level is greater than the second gray level, the gray level of the effective voltage signal becomes greater than the gray level of the image signal, and, when the first gray level is less than the second gray level, the gray level of the effective voltage signal becomes less than the gray level of the image signal.

6. The drive circuit for driving a display device according to claim 5, further comprising:

a display area including a plurality of block areas,

the second detector detecting, as the second gray level, a gray level that is detected on the basis of the image signal per unit time and that characterizes the brightness of the image on the entirety of the display area,

the first detector detecting, on the basis of the image signal supplied to the pixel electrodes in each of the block areas per unit time, the first gray level in each of the block areas,

the variation-signal setting unit setting the variation signal for each of the block areas on the basis of the gray level difference between the first gray level and the second gray level, and

the second signal supplying unit supplying the variation signal set for each of the block areas to the hold capacitors in the corresponding block area.

7. A drive method to drive a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive method comprising:

detecting a first gray level characterizing the brightness of an image on the basis of an image signal per unit time;

setting, on the basis of a setting table defining the relationship between the first gray level and a variation signal, the variation signal based on the first gray level; and

supplying the image signal and the variation signal to the pixel electrodes and the opposing electrode, respectively, thereby applying an effective voltage signal to the liquid crystal layer, the effective voltage signal being generated by modulating the image signal using the variation signal,

the setting table defining the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal in accordance with an increase in the first gray level.

8. A drive method to drive a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix, an opposing substrate provided with a plurality of transparent individually-driven block electrodes, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive method comprising:

detecting a second gray level characterizing the brightness of an image on the entirety of a display area on the basis of an image signal per unit time;

detecting a first gray level characterizing the brightness of the image on the basis of the image signal supplied to the pixel electrodes in an area opposing each of the block electrodes per unit time;

computing the gray level difference between the first gray level and the second gray level;

setting, on the basis of a setting table defining the relationship between the gray level difference and a variation signal, the variation signal for each of the block electrodes based on the gray level difference; and

supplying the image signal and the variation signal to the pixel electrodes and the opposing electrode, respectively, thereby applying an effective voltage signal to the liquid crystal layer, the effective voltage signal being generated by modulating the image signal using the variation signal,

the setting table defining the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal in accordance with an increase in the gray level difference.

9. A drive method to drive a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive method comprising:

detecting a first gray level characterizing the brightness of an image on the basis of an image signal per unit time;

setting, on the basis of a setting table defining the relationship between the first gray level and a variation signal, the variation signal based on the first gray level; and

supplying the image signal and the variation signal to the pixel electrodes and the hold capacitors, respectively, thereby applying an effective voltage signal to the liquid crystal layer, the effective voltage signal being generated by modulating the image signal using the variation signal,

the setting table defining the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal.

10. A drive method to drive a display device including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, the hold capacitors being grouped into a plurality of block areas to be driven independently, an opposing substrate provided with a

transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate, the drive method comprising:

detecting a second gray level characterizing the brightness of an image on an entirety of a display area on the basis of an image signal per unit time;

detecting a first gray level characterizing the brightness of the image in each of the block areas on the basis of the image signal supplied to the pixel electrodes belonging to that block area per unit time;

computing the gray level difference between the first gray level and the second gray level;

setting, on the basis of a setting table defining the relationship between the gray level difference and a variation signal, the variation signal for each of the block areas based on the gray level difference; and

supplying the image signal and the variation signal to the pixel electrodes and the hold capacitors, respectively, thereby applying an effective voltage signal to the liquid crystal layer, the effective voltage signal being generated by modulating the image signal using the variation signal,

the setting table defining the variation signal so that the gray level of the effective voltage signal becomes greater than the gray level of the image signal in accordance with an increase in the gray level difference.

11. A display device, comprising:

an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix;

an opposing substrate provided with a transparent opposing electrode;

a liquid crystal layer held between the active matrix substrate and the opposing substrate; and

the drive circuit as set forth in claim 1.

12. A display device, comprising:

an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix;

an opposing substrate provided with a transparent opposing electrode including a plurality of block electrodes;

a liquid crystal layer held between the active matrix substrate and the opposing substrate; and

the drive circuit as set forth in claim 3.

13. A display device, comprising:

an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes;

an opposing substrate provided with a transparent opposing electrode;

a liquid crystal layer held between the active matrix substrate and the opposing substrate; and

the drive circuit as set forth in claim 4.

14. A display device, comprising:

an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, the hold capacitors being grouped into a plurality of block areas to be driven individually;

an opposing substrate provided with a transparent opposing electrode;

a liquid crystal layer held between the active matrix substrate and the opposing substrate; and

the drive circuit as set forth in claim 6.

15. A projection display device, comprising:

a light source;

a light modulator including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate;

the drive circuit as set forth in claim 1 to drive the light modulator; and

a projection optical system that projects light emitted from the light modulator.

16. A projection display device, comprising:

a light source;

a light modulator including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix, an opposing substrate provided with a transparent opposing electrode including a plurality of block electrodes, and a liquid crystal layer held between the active matrix substrate and the opposing substrate;

the drive circuit as set forth in claim 3 to drive the light modulator; and

a projection optical system that projects light emitted from the light modulator.

17. A projection display device, comprising:

a light source;

a light modulator including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, an opposing substrate provided with a transparent opposing electrode, and a liquid crystal layer held between the active matrix substrate and the opposing substrate;

the drive circuit as set forth in claim 4 to drive the light modulator; and

a projection optical system that projects light emitted from the light modulator.

18. A projection display device, comprising:

a light source;

a light modulator including an active matrix substrate provided with a plurality of pixel electrodes arranged in a matrix and hold capacitors associated with the individual pixel electrodes, the hold capacitors being grouped into a plurality of block areas to be driven independently; an opposing substrate provided with a transparent opposing electrode; and a liquid crystal layer held between the active matrix substrate and the opposing substrate;

the drive circuit as set forth in claim 6 to drive the light modulator; and

a projection optical system that projects light emitted from the light modulator.